

## **Joe Mountain Lecture**

**CDC - Oct 26, 2009**

### **INTRODUCTION**

**Leon Trotsky, in 1935, said, “Old age is the most unexpected thing that happens to people.” Equally unexpected is to find there is still enjoyment in old age and pleasures in returning to a place of work that was as pleasant as CDC. We were immersed in what we were doing, but had great fun. When I reminisce with CDC workers we return to the fun and jokes.**

**This is my second talk at CDC in a month. More than they allowed when I worked here! Once again I repeat, I will use the word “we” because no one ever leaves CDC. They simply become CDC in another location.**

**It happened two years ago. I boarded a plane in Seattle, sat in an aisle seat and began to read the newspaper. A man excused himself; and I stood up to let him get to the seat next to me. I did a cursory look, realized he was in his mid-80's, with white hair and a white beard, and an unwanted thought went through my mind. This guy is not very attractive, even for an old man. We talked for a moment and I became lost, once again, in my newspaper. A few minutes later a woman tapped me on the shoulder. She was standing in the aisle waiting to go to her seat. She said, “Excuse me, are you guys twins?”**

**Stephen Smith, Health Commissioner of New York city, before Dave Sencer and Tom Frieden, was 49 when he helped to form the American Public Health Association. For the 50<sup>th</sup> anniversary of the APHA, he was invited back to speak. At age 99 he walked to the lectern for the expected history of the APHA but instead he talked about the future of public health.**

**I will end today on the future of CDC, but need to give context for that future.**

**We hold this talk on October 26 to recall Joe Mountin, who formed CDC from the malaria program of WWII, and for the onset of the last naturally occurring case of smallpox 32 years ago today. Why celebrate 32 years? Because WHO said an area must go 2 years without a case to declare it free of smallpox.**

**It was a curious last case, the Somalia case. A couple with two small children entered a hospital compound in mid October of 1977 with two children who had smallpox. A cook from the hospital was at the entrance and when they asked for directions to the infectious disease ward he took them to the ward. He had been vaccinated, assumed he was protected, but had not had a take, so on October 26<sup>th</sup> he developed the first symptoms of smallpox, the final case in an unbroken chain of transmission that went back thousands of years.**

**A chain of transmission broken, thanks to CDC. Dave Sencer was director of CDC at that time, and ahead of his time, he understood international health was an outdated concept and must be changed to global health. International conjures up a dichotomy of national versus international. With global health, smallpox in Africa or India or Brazil became a U.S. domestic issue, not just an international issue. He provided WHO with needed**

support, including scores of people in the lab, in Atlanta, and eventually several hundred around the world. The effort not only protected the US and the world, but strengthened WHO and CDC. And Dave is here today to enjoy the harvest and to launch the website on smallpox that will eventually be the website for global health.

Twenty five years ago I gave the Joe Mountain lecture, the beginning of what I hope will be a tradition every quarter century.

I talked about Gandhi and the traits that made him such a model.

While it is hard for those of us separated by 6 decades and 10,000 miles to completely understand Gandhi, there are things we do know.

- He was obsessed with the idea of liberation from bondage of all kinds.
- He wanted social change without violence.
- He demanded, by example, self-sacrifice.
- He was driven by the idea that the world could be better.
- He lauded the beauty of menial jobs, which were well done.
- He emphasized the worth of individuals.

I also talked about Gandhi-like people today, often unrecognized.

Then, the conclusion...that it is possible for institutions to take on the personalities of individuals. And CDC had become a Gandhian institution. As with Gandhi, it is an honor that must be earned daily. I was filming a tribute to Nobel Laureate Norman Borlaug 10 days ago when the interviewer told how two friends became sick while taking a boat to Haiti. The husband died and the interviewer told of his desperate call to CDC, a diagnosis by phone of malaria as the wife was dying, but saved by CDC getting the right medication to her in time. That is part of earning the Gandhian label...every day...by the science we develop and dispense, by the way we treat the public we serve and by the way we treat each other.

Mentors are both individual and institutional. I am attuned to mentors and at one point had 7 mentors in their 90's. I have lost four of them in the past two years, Tom Weller (Nobel laureate for growing polio virus and making vaccine possible), Julius Richmond (Surgeon General), Charlie Houston (who lost a chance to summit K2 in 1953 in order to attempt a rescue of a climber with deep vein thrombosis) and Norman Borlaug (Nobel laureate for the green revolution).

But institutions are also mentors and CDC molded the thousands who have gone through this institution into public health people, global people, but even more, civilized people, imbued with the idea that the bottom line is not fame, science, brilliance, money, or publications, but how we treat other people.

The world gets confused. Joshua Bell, a great musician, sold out a concert in Boston at \$100 a seat, playing his \$3.5 million violin. Two days later, as part of an experiment, he played in a metro station, and with the same violin gave an hour long concert playing one of the most intricate and beautiful pieces, unrecognized by people who hurried by. You

see, we are easily confused and even fooled regarding what is important, true and right in life.

Kierkegaard, the great Danish theologian told the story of a person who broke into a jewelry store, stole nothing, but simply switched the price tags. We live in a world where the price tags have been switched. We pay a premium for athletes, financial crooks, health insurance executives, guardians of the market place...and we put the lowest price tags on teachers, social workers, mental health workers and public health workers. What would it take to change the price tags so that we are paying for those who provide a quality life and a quality future?

Three months ago I attended the centennial celebration for the National Institute of Communicable Diseases in India. The speakers spoke of the influence of CDC/Atlanta and CDC/Atlanta people were on the program. At the end of the day, the Minister of Health announced that they were changing the name to the National Center for Disease Control. And my mind went back to my talk 25 years ago. It is possible for CDC to not only be Gandhian, and a mentor, but even a mentor in the country that produced Gandhi.

Back to smallpox eradication. I was invited to India to talk about the lessons of smallpox for other health programs. The greatest lesson? Getting rid of a terrible disease was nice, but the greatest lesson was that eradication didn't happen by chance. It happened because of a vision, a plan, a coalition, and lots of hard work. It is possible to plan a more rational future.

It is not destiny for the world to have smallpox, polio, measles, or guinea worm. It is not destiny for 49 million Americans to lack health insurance. It is not essential for the world to have wars, and domestic violence, bank failures, ponzi schemes and poverty. It is possible for us to provide leadership and organize for a future that makes more sense.

Stephen Hawking said that the history of science is the gradual realization that things do not happen in an arbitrary fashion. Jonas Salk reminded us, evolution will be what we want it to be because this is not a fatalistic world. You would not be working at CDC if you were fatalists. You became educated because you think you can change the future...and you can.

CDC was not built by fatalists nor the faint hearted. We remember the trials of 1976 with swine flu. I recall the problems with one of our best moments, Legionnaires – and the ridicule of a Congressman who continued to say that it was so clear that it was a toxin and that CDC had missed the clues.

Then Joe McDade isolated the legionnaires organism and CDC confirmed this before releasing the information. When confirmed, Dave Sencer called the Congressman to tell him of the finding; I suspect with some satisfaction. The Congressman knew something about toxic situations and how easy it is to miss clues when he accepted a bribe from an undercover FBI agent...and went to jail. CDC history is great!

And sometimes fortune has shined on us unexpectedly. It was my last budget cycle as director of CDC. The Public Health Service appeals to the Secretary were scheduled for a

**Monday morning. I returned home on Sunday with my family to find someone had broken into our house. It was long after midnight when we finished with the police and after a short night I was on the Early Bird to Washington DC, upset and feeling violated.**

**It didn't improve in Washington DC when our meeting in the Public Health Service offices, before going to see the Secretary, informed me that CDC would get three appeals but that the budget specialists would make the presentation and I was there in case the Secretary had a question they couldn't answer. In addition there would be no capital projects and if anyone attempted an end run, they would not only lose that project but an equal amount from the regular budget.**

**NIH was the first agency discussed with the Secretary and the director said not a word. CDC was second and within a minute the budget presenters got confused on two numbers that did not seem to add up. Secretary Schweitzer looked bemused and said, "Bill is right here. Couldn't we ask him?" Without another word he turned to me and asked me to present CDC's appeals. I did the first two in what I hoped was a professional manner but with the third appeal, a reduction in immunization funds, I said to the Secretary that I had been burglarized over the weekend, felt violated, but I would recover. But I said the third appeal raised the same emotions of violation. OMB was attempting to rob the American people of health and no one in the department was standing up to say that was wrong.**

**He turned to his budget people and said, "Give him all three appeals." He then asked me, "Did you know it was going to be that easy?" I said no. He said, "If you had known it was going to be that easy what would your 4<sup>th</sup> appeal have been?" I replied that my fourth appeal would have actually been my first appeal and glancing at Ed Brandt I saw his hand on his forehead as he recognized an end run. I then told the Secretary about our need for a Class IV safety lab, about the agents that had no vaccine and no treatment and about our use of a quarantine trailer that allowed work on only one agent at a time. If we had a viralological emergency it would take only two hours for the country to know that we could not cope. He turned to his budget people and said, "We have to at least try."**

**A week later he called me at home at night from the White House. He was as giddy as a child as he told me that he had just gone head to head with David Stockman and that CDC was getting a Class IV facility. Furthermore, to speed up the process it would be put in the current year's budget and we would not have to argue our case.**

**Some years later I attended the dedication of the new facility and listened to the speeches regarding what the building was capable of and how it had been realized. I then realized I was probably the only person in the room who understood that CDC had a new Class IV lab because of an unknown burglar in Atlanta. And that is not how the system is supposed to work.**

**But that is the past. At...**

## **PRESENT**

- 1. You are faced with huge problems and many expectations.**
- 2. But that has always been true. And I see a great future.**

3. The first quote that I collected..."I am full persuaded, that when enlightened people, will take the trouble to examine so minutely into the state of society, as your inquiries seem to go, it must result in greatly ameliorating the condition of the people..." George Washington commenting on the drawing up of the statistical account of Scotland, March 15. 1793 - Langmuir said it was the secret to our success. Because we were not in the political environment of Wash DC we could concentrate on the problem "and greatly ameliorate the suffering of the people..."

## **WHAT OF THE FUTURE?**

1. Lincoln Steffens, 70 years ago – the greatest song has not been sung; the greatest poem has not been written. Your greatest glory is yet to come.
2. Be assured of your contributions...but you may not actually see them. 10 years ago, while speaking to the World Health Assembly, I told the Ministers of Health of the world that they were building cathedrals and like the artisans of Europe they would never see the work completed and must believe it was worth doing. You are building a cathedral.

Several weeks ago I talked about generic challenges.

1. Seeing the world whole.
2. Thinking forward – planning for centuries ahead.
3. Thinking globally.
4. The challenge of health equity

Today, in closing, I want to mention four specific challenges. The second lesson of smallpox eradication is "Know the truth." CDC learned to develop surveillance systems to know the truth. To document problems and suggest solutions. It didn't come easily. The first national surveillance system for any disease was for malaria when I was in high school. The second came when I was in college, because of the problem with Cutter polio vaccine. The third in 1957 as the result of influenza. And then they came by the dozens. CDC is working in the following 4 areas but my plea is give them new focus.

### **(1) MENTAL HEALTH**

What if CDC, working with the National Institute of Mental Health, developed surveillance systems that clearly mapped the problems, the risk factors and chronicled successes? If we could identify the people with depression, improve treatment and show the impact, what might happen to the happiness and productivity of a society if a sizable percentage of depressed people were given attention and treated appropriately?

### **(2) GLOBAL WARMING**

There are many programs aimed at global warming, temperature measurements, chemical measurements etc. How could CDC improve the dialogue and action if it led the global effort to do surveillance on the health effects on humans, animals and ecological systems, even before changes are obvious? What does WHO need to do, national health systems and health delivery systems to monitor changes?

### **(3) SOCIAL DETERMINANTS OF HEALTH**

**When William Wilberforce finally succeeded 2 centuries ago, in making the slave trade illegal in England, he was as much a healer as Edward Jenner, who was busy developing smallpox vaccine at that time. Public health should be understood in a broader context of all of the things leading to unnecessary suffering, premature death or compromised quality.**

**Dubois 1903 – the problem of the 20<sup>th</sup> century is race. We face the twin problems of race and poverty. Both public health problems because of what they do to health. CDC is not the solution to poverty, racism, lack of education, gender bias, unemployment, homelessness...but it could develop the surveillance systems on health outcomes and risk factors associated with these social conditions and keep society aware of where attention must be placed. It is all public health.**

### **(4) HEALTH CARE IN THE UNITED STATES**

**And now some of you will disagree with me. But hold your disagreement until I have outlined a solution. I may be wrong...but I don't think so.**

**In the 1950's while in medical school, the AMA told us to avoid socialized medicine. I bought into the argument and watched for socialism. We never saw capitalism gaining, and never would have thought it more dangerous than socialism. Our health care mess today is not due to health care workers, it is due to capitalism making profit the bottom line. Some things don't lend themselves well to the market place, such as solving the tobacco problem, improving water supplies or waste disposal. They require collective action.**

**As the country debates the issue, there are many contenders for the most ridiculous statements. One senator spoke against equality saying he did not need maternal health coverage. A colleague said, "But your mother did." Senator Grassley when asked by a man how he could get the same medical coverage that Grassley had, answered, "Get a federal job." Ron Paul says that health care is so complex that it can only be solved by the market place. Can you imagine, one year after the market place let us all down, destroyed lives, took homes, left millions unemployed and reduced hope, he says the market place is the answer for health?**

**It reminds me of many years ago, at a lunch given by Sheila and Allan Bleich, when someone asked for one example of the government doing anything better than could be done by the private sector. Henry Falk, from CDC, said, in a quiet voice, how about winning World War 2? The insurance industry argues that government is inefficient, despite Medicaid having lower overhead than the insurance industry. It says competition is essential. Then they say they are against a public option because they can't compete with government. And they say the public plan would negotiate better prices, which sounds like an argument for, not against.**

**Paul says the government should not be involved in H1N1 flu. I take comfort that flu is being addressed by CDC, not by congress or the market place.**

A strong contender for the most ridiculous statement would be Senator John Ensign, who said too much is made of the US health indices not being as good as other countries. He said if you remove highway deaths and gunshot deaths from the total, our mortality figures are quite competitive. As Jon Stewart says, that is like saying if you remove my affair I am almost monogamous.

And we don't even get the facts right. The Congressional Budget Office, non partisan, gives figures used in debating the costs. But our own Jim Marks, now working at the Robert Wood Johnson Foundation, has pointed out that by law they are not allowed to count any benefits more than 10 years in the future. How much of your work on immunizations, smoking, obesity, hypertension etc. has benefits 10, 20 and more years in the future. That is one of our goals. But those benefits can't be counted, by law, in the estimates. How often do you hear anyone challenge those projections for that reason? It is a fine mess we have ourselves in.

Zimbaro, in his book, "The Lucifer Effect" recounts the 1971 Stanford Prison Experiment which showed that arbitrarily making some students guards and some prisoners, corrupted both groups almost immediately. He looks at many disasters such as Catholic priests abusing children, Enron, My Lai and our health care system. He says we look for bad apples, and there are some, but the real problem is a bad barrel. Practitioners taught to do no harm, can't consul on prevention because they have time limits and no reimbursement. Most of the damage is done by average people in bad situations.

But the opposite is also true. By creating good barrels, average people perform even better than average. That to me is a secret of CDC. Now lets apply that to health care delivery.

My conclusion is that health care can improve by one of two approaches. A single payer system that actually aims at equity for all of us (which might happen if Congress would be held to average health care for themselves...the corollary of Gandhi saying his idea of the golden rule is that he should not be able to enjoy what cannot be enjoyed by others) or a system that actually uses the market place and rewards plans that improve health not simply provide sickness care.

This would require a metric to measure health outcomes and I think that is a role for CDC. We could still use the current insurance approaches but if additional rewards were paid to the plans with the best outcomes you can bet that attention would change from process to outcomes. It would be using the market place for the kind of competition that it advertises. If in addition there would be even more rewards for improving the health outcomes for a designated high risk group (including the poor, obese people, smokers, diabetics etc.), suddenly insurance plans would seek out sick people rather than well people. That is where the profit would be. They would incorporate every prevention program that can be devised, smoke-enders programs, exercise programs, nutritional programs, diabetes best practices, blood pressure best practices...in a word, prevention would become part of health care delivery. Altruism, like evil, is readily responsive to situational forces. The market place could then provide the best outcomes in the world.

CDC is already working on this and my plea is to give it higher priority. This is a service to the country and the future with high high value.

**Last time I mentioned the Greek philosopher Democritus who said 2400 years ago, “The wise person belongs to all countries, for the home of a great soul is the whole world.” Let me add, “the wise person also belongs to all ages, learning from the past and affecting everything that happens in the future.”**

**What is the summary? - This is the finest time I have seen in 50 plus years to be in public health and global health. Tools, resources, interest, ability to have outcomes, global health education tracks, ease of communications, travel and access to information, make it a special time. Savor the moment.**

**And to end with Gandhi. He once said that people often become what they believe themselves to be. If CDC sees itself as the guardian not only of public health but of all health it could become the deciding factor in health care delivery, global warming, social determinants of health and mental health.**

**So return to work and continue to write inspirational history. Thank you.**